

**FACT SHEET FOR STATE WASTE DISCHARGE
PERMIT NO. ST-9118**

**WASHINGTON HILLS CELLARS
dba Apex Cellars**

SUMMARY

Washington Hills Cellars is seeking reissuance of its State Waste Discharge Permit ST-9118. The winery is located at the southeast corner of East Lincoln Avenue and South 1st Street, within the city limits of Sunnyside, WA, and north of the Port of Sunnyside. Approximately 2,000 tons of grapes are processed annually at the winery. Washington Hills Cellars grows its own grapes and buys them from outside growers. The company operates one shift per day for ten months of the year and two shifts per day during the grape pressing season. They produce approximately 100,000 cases of wine annually.

Process water is supplied by an old (pre-1945) onsite well. Water use ranges from 5,000 to 10,000 gallons per day. Process wastewater streams consist of tank and barrel wash water and non-contact cooling water from the refrigeration system. Approximately fifty percent of the refrigeration cooling water is recycled and the remainder is discharged to the Port of Sunnyside Industrial Wastewater Treatment Facility, IWWTF. During 2002 to 2004 timeframe, wastewater volumes discharged to the IWWTF ranged from 252 to 34,250 gallons per day.

During the present permit term the Permittee has been in substantial compliance with the conditions of the permit. Wastewater maximum flow has been reduced by half, while BOD, TSS have increased fourfold and TKN by eight. The averages for the above parameters however, have remained relatively stable and therefore the proposed permit term conditions are in effect unchanged from the current permit.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-9118. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the Port of Sunnyside Industrial Wastewater Treatment Facility (IWWTF). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the State is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the State. Regulations adopted by the State include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

This fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. This fact sheet will not be revised. Changes to the draft permit will be addressed in Appendix C—Response to Comments.

GENERAL INFORMATION	
Applicant	Washington Hills Cellars
Facility Address	111 E. Lincoln Avenue Sunnyside, WA 98944
Type of Facility:	Winery
Facility Discharge Location	Latitude: 46° 19' 01" N Longitude: 120° 01' 07" W
Treatment Plant Receiving Discharge	Port of Sunnyside IWWTF
Contact at Facility	Name: Brian Carter Telephone #: 509-839-9463
Responsible Official	Name: Brian Carter Title: Vice President-Winemaking Address: Same as above Telephone #: Same as above

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

The winery is located at the southeast corner of East Lincoln Avenue and South 1st Street, within the city limits of Sunnyside, WA, and north of the Port of Sunnyside. The facility was constructed in the 1920's and housed a creamery for many years. Washington Hills Cellars began operations at the site in 1990, by leasing the facility from another winery, and assumed ownership in 1992.

Approximately 2,000 tons of grapes are processed annually at the winery. Washington Hills Cellars grows its own grapes and buys them from outside growers. The company operates one shift per day for ten months of the year and two shifts per day during the grape pressing season.

Process water is supplied by an old (pre-1945) onsite well. Water use ranges from 5,000 to 10,000 gallons per day. Process wastewater streams consist of tank and barrel wash water, stormwater and non-contact cooling water from the refrigeration system. Approximately fifty percent of the refrigeration cooling water is recycled and the remainder discharged to the Port of Sunnyside Industrial Wastewater Treatment Facility, IWWTF. During 2002 to 2004 timeframe, wastewater volumes discharged to the IWWTF ranged from 252 to 34,250 gallons per day.

The facility's stormwater and wastewater is collected in a sump located approximately 200 feet southeast of the building. The sump and a wastewater sampling station are maintained by the IWWTF. The sump is accessed through a manhole. Solids are settled in the sump and are periodically cleaned out and landfilled. Wastewater from the sump is then screened and discharged to the IWWTF sewer.

An application for a permit was received by the Department on February 11, 2004 and accepted by the Department on February 20, 2004. The current State Waste Discharge Permit to Washington Hills Cellars became effective on October 5, 1999.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

A compliance inspection without sampling was conducted on October 17, 2003.

During the history of the current permit, the Permittee has generally remained in compliance with permit conditions, based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department, and inspections conducted by the Department.

The Department has issued only informal letters of non-compliance because these were isolated events. The violation events were: TSS effluent limits occurring in December, 2003, in July 2002 and January 2002, TKN violations occurring in December and January of 2002, and one violation of the BOD limit in February of 2002.

WASTEWATER CHARACTERIZATION

Hydraulic and organic loadings of pollutants in the Permittee's discharge as reported in the 1998 DMRs are compared with the last two years from January 2002 to March 2004. These discharges are characterized for the following parameters:

Parameter	Previous Minimum	Current Minimum	Previous Maximum	Current Maximum	Previous Average	Current Average
Flow, in gallons/month	11,100	15,322	448,052	242,900	136,259	92,232
BOD ₅ , in pounds/month	296	228	2,731	8,297	1464	1843.8
TSS, in pounds/month	84	85	1,043	4,419	646	603.5
TKN, in pounds/month	5	1.6	47	374	20	33.4

PROPOSED PERMIT LIMITATIONS

EFFLUENT LIMITATIONS BASED ON USER CONTRACT

In order to protect the Port of Sunnyside IWWTF from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. The Permittee's loading allocations were apportioned from the total assessed treatment capacity of the IWWTF.

Effluent limitations contained in this permit are based on hydraulic and organic loading allocations detailed in the User Contract between the Port of Sunnyside and the Permittee. Schedule A of the User Contract contains the Permittee's monthly hydraulic and organic loading

allocations. Schedule A from the most recent contract, dated **October 27, 1999**, is presented in the table below:

MONTH	HYDRAULIC DISCHARGE		BOD	TSS	TKN
	Monthly total, in cubic feet Contract ¹ (gallons) ²	Peak ³ (gallons)	Monthly total, in pounds	Monthly total, in pounds	Monthly total, in pounds
January	22,500 (168,300)	*	3,000	1,000	150
February	15,000 (112,200)	*	2,000	670	100
March	15,000 (112,200)	22,500 (168,300)	1,000	670	100
April	15,000 (112,200)	22,500 (168,300)	1,500	670	100
May	15,000 (112,200)	22,500 (168,300)	3,000	670	100
June	15,000 (112,200)	22,500 (168,300)	2,500	670	100
July	15,000 (112,200)	22,500 (168,300)	1,500	670	100
August	22,500 (168,300)	33,750 (392,700)	2,500	1,000	150
September	45,000 (336,600)	67,500 (504,900)	6,000	2,000	300
October	52,500 (523,600)	78,750 (589,050)	8,000	2,350	350
November	37,500 (392,700)	*	3,000	1,700	250
December	30,000 (224,400)	*	3,000	1,300	200
Annual Total	300,000 (2,244,000)		37,000	13,370	2,000

1. Capital charges are based on monthly contract volumes; see user contract for excess volumes.
2. Conversion cubic feet to gallons used cu. ft. X 7.48 = gallons.
3. The industry may exceed the monthly contracted volumes so long as the total discharge for the four consecutive months of November through February (*) is not in excess of 140,000 cubic feet.

Schedule A is included in this fact sheet to illustrate the structure of the loading allocations under which the Permittee operates. Schedule A is not incorporated directly into the permit document because contract conditions are occasionally modified as the Port finds it necessary. However, inclusion of Schedule A into Appendix A of the Operation and Maintenance (O & M) Manual is required by Special Condition S4.A3. of this permit. Schedule A will contain the enforceable limits of the permit.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in this permit under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

The Port of Sunnyside routinely monitors four times a month. The monitoring results are submitted to the Department monthly on the Permittee's Discharge Monitoring Report, DMR.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The requirements of Special Condition S3. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 273-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE

This permit contains Special Condition S5. as authorized under RCW 90.48.110, WAC 173-220-150, Chapter 173-230 WAC, and WAC 173-240-080. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

The Permittee will be required to review the O&M annually and confirm the review by letter to the Department.

The O & M must contain the most recent Schedule A, which details the most recent User Contract between the Port of Sunnyside and Apex Cellars specifying the enforceable limits of the permit. The Permittee is required to submit the updated O&M Manual with Appendix A by November 30, 2004.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the IWWTF. These include substances which cause pass-through or interference, pollutants which may cause damage to the IWWTF or harm to the IWWTF workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the State from leachate of solid waste.

This permit requires, under authority of RCW 90.48.080 that the Permittee review the plan annually and submit any modification to Solid Waste Plan to the Department and local solid waste permitting agency for approval, if required by local regulation. The Permittee is required to review the Plan annually and confirm the review by letter to the Department.

SPILL AND SLUG DISCHARGE PREVENTION AND CONTROL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to impact the IWWTF if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

In addition, the Department has determined that the Permittee has the potential for a batch discharge that could adversely affect the IWWTF; therefore, a Slug Discharge Control Plan is required (40 CFR 403.8 (f)).

This permit requires the Permittee update its Spill and Slug Discharge Prevention and Control Plan for preventing and controlling the accidental release of pollutants to the IWWTF and State waters and for minimizing damages if such a discharge occurs as needed. The Permittee is required to review the Plan annually and confirm the review by letter to the Department. Any changes shall be submitted to the Department.

GENERAL CONDITIONS

General Conditions are based directly on State laws and regulations and have been standardized for all industrial waste permits for discharge to publicly owned treatment works issued by the Department.

Condition G1. requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2. requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3. specifies conditions for modifying, suspending or terminating the permit. Condition G4. requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5. requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6. prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7. and G8. relate to permit renewal and transfer. Condition G9. requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10. prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11. requires the payment of permit fees. Condition G12. describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for five (5) years.

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

The Department published a Public Notice of Draft (PNOD) on ----, 2004 and ----, 2004 in the Sunnyside Daily Sun News to inform the public that a draft permit and fact sheet were available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 509-457-7105, or by writing to the address listed above.

This fact sheet and permit were written by Richard Marcley.

APPENDIX B -- GLOSSARY

AKART--An acronym for "all known, available, and reasonable methods of prevention, control, and treatment" and includes best management practices as may be stipulated by the Department.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation--The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards--National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a IWWTF by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Engineering Report--A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference--A discharge which, alone or in conjunction with a discharge or discharges from other sources, either: (1) inhibits or disrupts the IWWTF, its treatment processes or operations, or its sludge processes, use or disposal; or (2) therefore is a cause of a violation of any requirement of the IWWTF's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal.

Local Limits--Specific prohibitions or limits on pollutants or pollutant parameters developed by a IWWTF.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through--The discharge of pollutants through a municipal sewerage system into waters of the State in quantities or concentrations which are a cause or significantly contribute to a violation of any requirement of water quality standards for waters of the State of Washington, or of the NPDES permit or State waste discharge permit, including an increase in the magnitude or duration of the violation.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--Industrial dischargers to a IWWTF that have effluent limitations defined in a category (40 CFR 403.6 and 40 CFR Chapter I, subchapter N). However, the control authority may make a determination that even though an industrial user belongs to a category that has effluent limits for pretreatment, that industry is not a significant industrial because there is no reasonable potential for affecting the IWWTF's operation. A SIU may also be any other industrial user that: 1. discharges an average of 25,000 gallons per day or more of process water, 2. makes up more than 5 percent of the average hydraulic flow (dry weather) or 5 percent of the organic capacity of the plant, or 3. the control authority believes has a reasonable potential to adversely affect the IWWTF's operation.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the IWWTF. This may include any pollutant released at a flow rate which may cause interference with the IWWTF.

State Waters--Lakes, rivers, ponds, streams, wetlands, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria--A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids--That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent pollution of the receiving water.

APPENDIX C -- RESPONSE TO COMMENTS